

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A metal cord for reinforcing a rubber article comprising:

a core formed of one filament; and

a sheath formed of 1 to 6 filaments arranged around the core,

wherein said filament of the core is formed of a waved filament waved in a two-dimensional wave shape having crest portions and trough portions in a repeated manner, in a state before being bundled, ~~and~~ is twisted with said sheath while applying the torsion so as to be formed in a three-dimensional wave shape within said metal ~~cord~~ cord, and the filament of the core in the two-dimensional wave shape is a zigzag shape.

2. (Previously Presented) The metal cord for reinforcing a rubber article as claimed in claim 1, wherein a diameter d of said core filament is between 0.15 and 0.50 mm and substantially the same as that of the filament of said sheath.

Appl. No. 09/989,426

Art Unit 1774

May 18, 2004

Reply to Office Action of November 19, 2004

3. (Currently Amended) A metal cord for reinforcing a rubber article comprising:

a core formed of one filament, wherein said filament has a two-dimensional wave shape with crest portions and trough portions in a repeated manner; and

a sheath formed of 1 to 6 filaments arranged around said core;

wherein said sheath and said core are in a twisted state and form a three-dimensional wave shape; and

the diameter of said two-dimensional wave shape of the filament of the core is larger than the diameter of the filament of the core ~~itself~~.
itself; and

the filament of the core in the two-dimensional wave shape is a zigzag shape.

4. (Previously Presented) The metal cord for reinforcing a rubber article as claimed in claim 3, wherein a diameter d of said core filament is between 0.15 and 0.50 mm.

5. (Previously Presented) The metal cord for reinforcing a rubber article as claimed in claim 3, wherein a diameter d of the filament of said sheath is between 0.15 and 0.50 mm.

Appl. No. 09/989,426

Art Unit 1774

May 18, 2004

Reply to Office Action of November 19, 2004

6. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 3, 4 or 5, wherein a diameter d of said core filament is substantially the same diameter d as that of the filament of said sheath.

7. **(Canceled)**

8. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 1, wherein the filament of the core in the two-dimensional wave shape is a sine wave shape.

9. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 1, wherein the filament of the core in the two-dimensional wave shape has a wave pitch P_w being between 3.0 and 9.0 mm and a wave height h being between 0.20 and 0.80 mm

10. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 1, wherein a torsion pitch P_n at a time of twisting the filament of the core in the two-dimensional wave shape is between 5.0 and 600.0 mm.

11. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 1, wherein a twist pitch P_y at a time of

Appl. No. 09/989,426

Art Unit 1774

May 18, 2004

Reply to Office Action of November 19, 2004

twisting the filament of the sheath wave shape is between 5.0 and 30.0 mm.

12. **(Previously Presented)** The metal cord for reinforcing a rubber article as claimed in claim 1, wherein said torsion pitch P_n of the filament of the core is larger than the twist pitch P_y of the filament of the sheath.

13. **(Withdrawn)** A method of producing a metal cord having a core formed of one filament, and a sheath formed of 1 to 6 filaments arranged around the core, comprising the steps of:

forming said filament of the core from a waved filament having a two-dimensional wave shape with crest portions and trough portions in a repeated pattern, in a state before being bundled, and twisting said filament with said sheath while applying torsion such that said filament is formed into a three-dimensional wave shape within the metal cord.

14. **(Withdrawn)** The method of producing a metal cord as claimed in claim 13, wherein a diameter d of said core filament is between 0.15 and 0.50 mm and substantially the same as that of the filament of said sheath.

Appl. No. 09/989,426

Art Unit 1774

May 18, 2004

Reply to Office Action of November 19, 2004

15. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein the filament of the core in the two-dimensional wave shape is a zigzag shape.

16. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein the filament of the core in the two-dimensional wave shape is a sine wave shape.

17. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein the filament of the core in the two-dimensional wave shape has a wave pitch P_w being between 3.0 and 9.0 mm and a wave height h being between 0.20 and 0.80 mm.

18. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein a torsion pitch P_n at a time of twisting the filament of the core in the two-dimensional wave shape is between 5.0 and 600.0 mm.

19. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein a twist pitch P_y at a time of twisting the filament of the sheath wave shape is between 5.0 and 30.0 mm.

Appl. No. 09/989,426

Art Unit 1774

May 18, 2004

Reply to Office Action of November 19, 2004

20. (Withdrawn) The method of producing a metal cord as claimed in claim 13, wherein said torsion pitch P_n of the filament of the core is larger than the twist pitch P_y of the filament of the sheath.